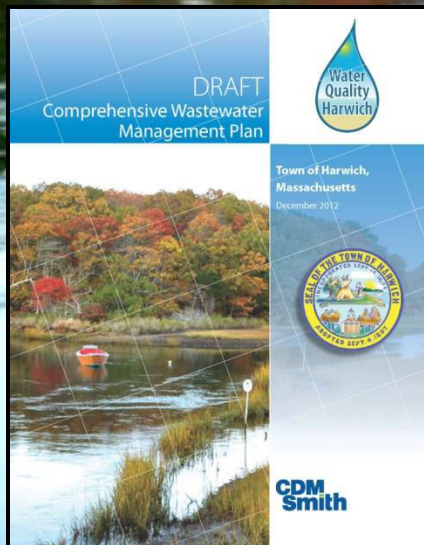




Harwich, Massachusetts

Overview of Comprehensive Wastewater Management Plan (CWMP)

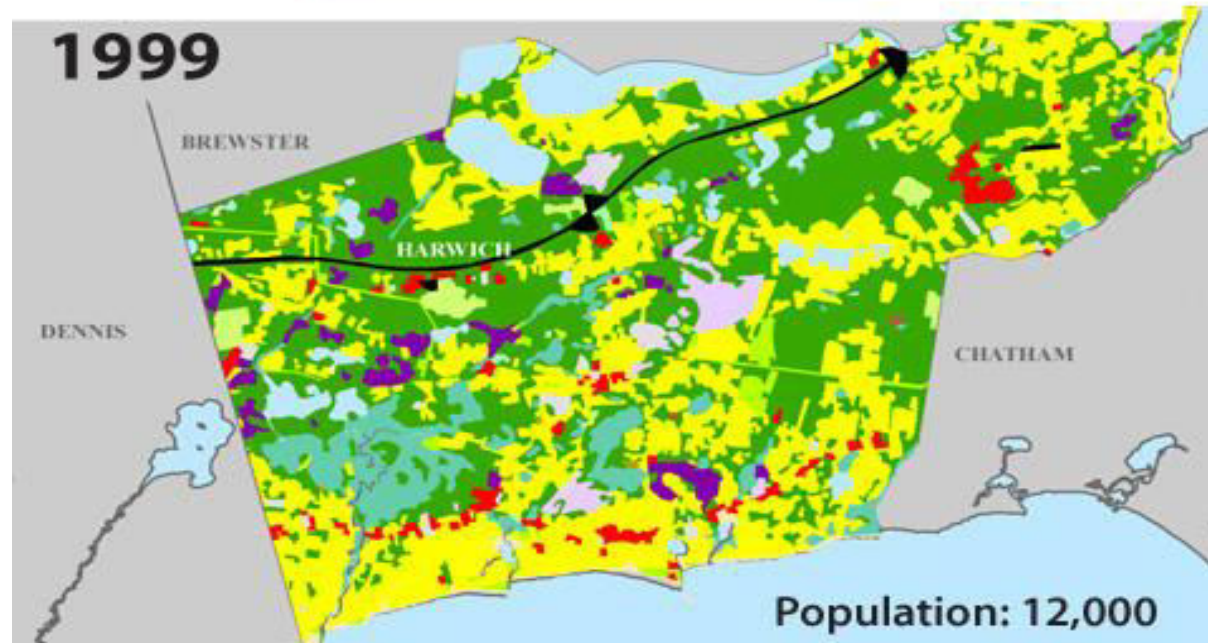
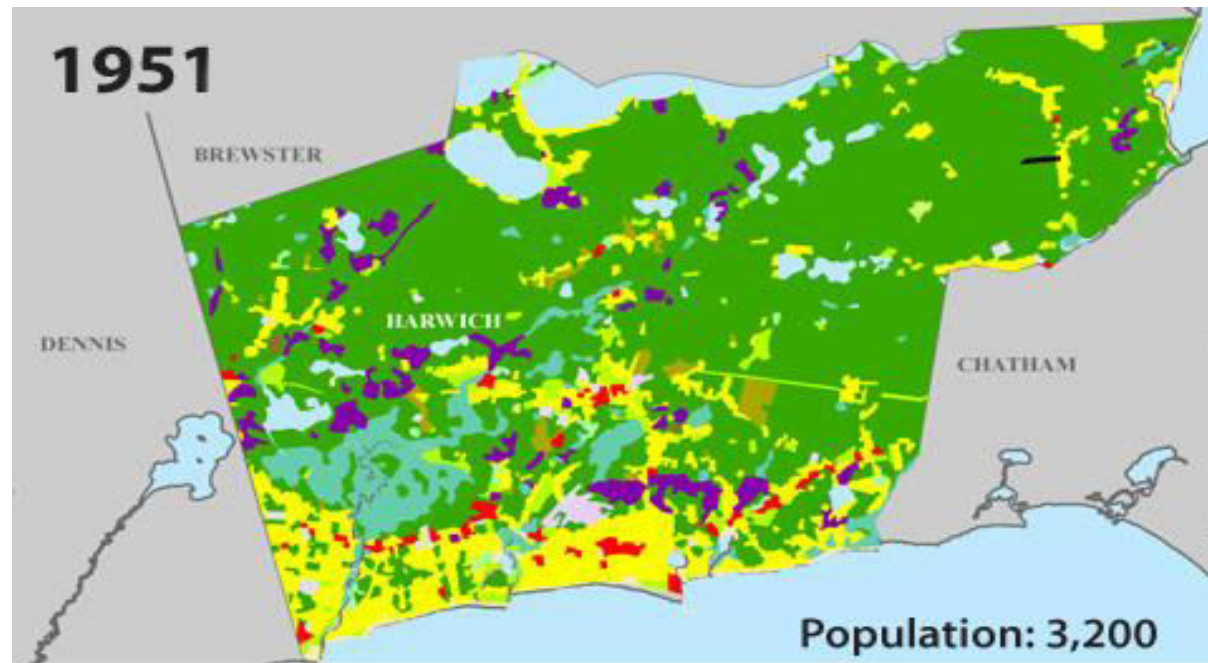


East Harwich Planning Workshop

June 4, 2014

Harwich Land Use Development 1951 and 1999

- 400% population growth from 1951 to 1999

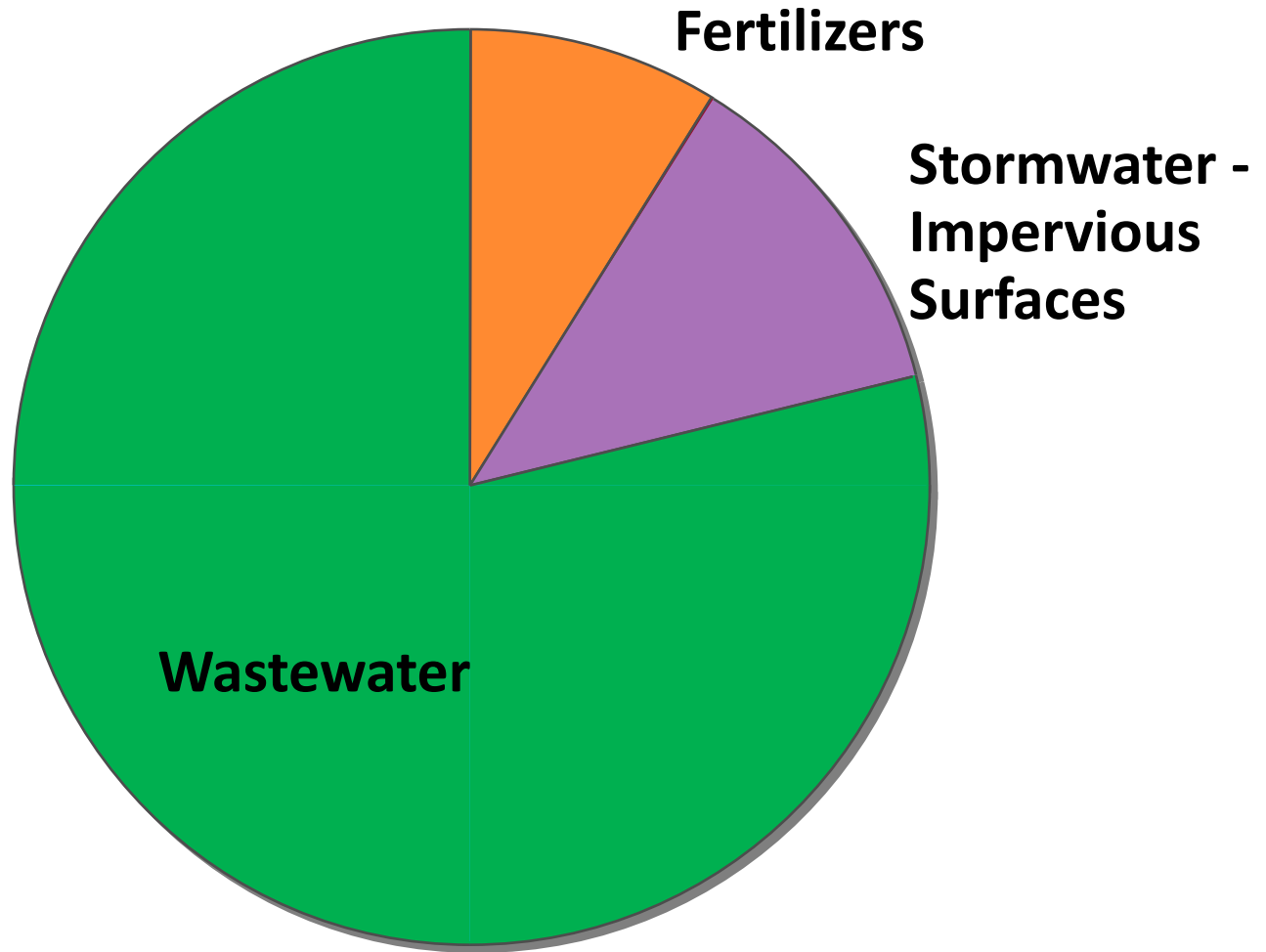


Allen Harbor Algae Bloom



Summer 2007

Controllable Sources of Nitrogen



Local Control - Typical

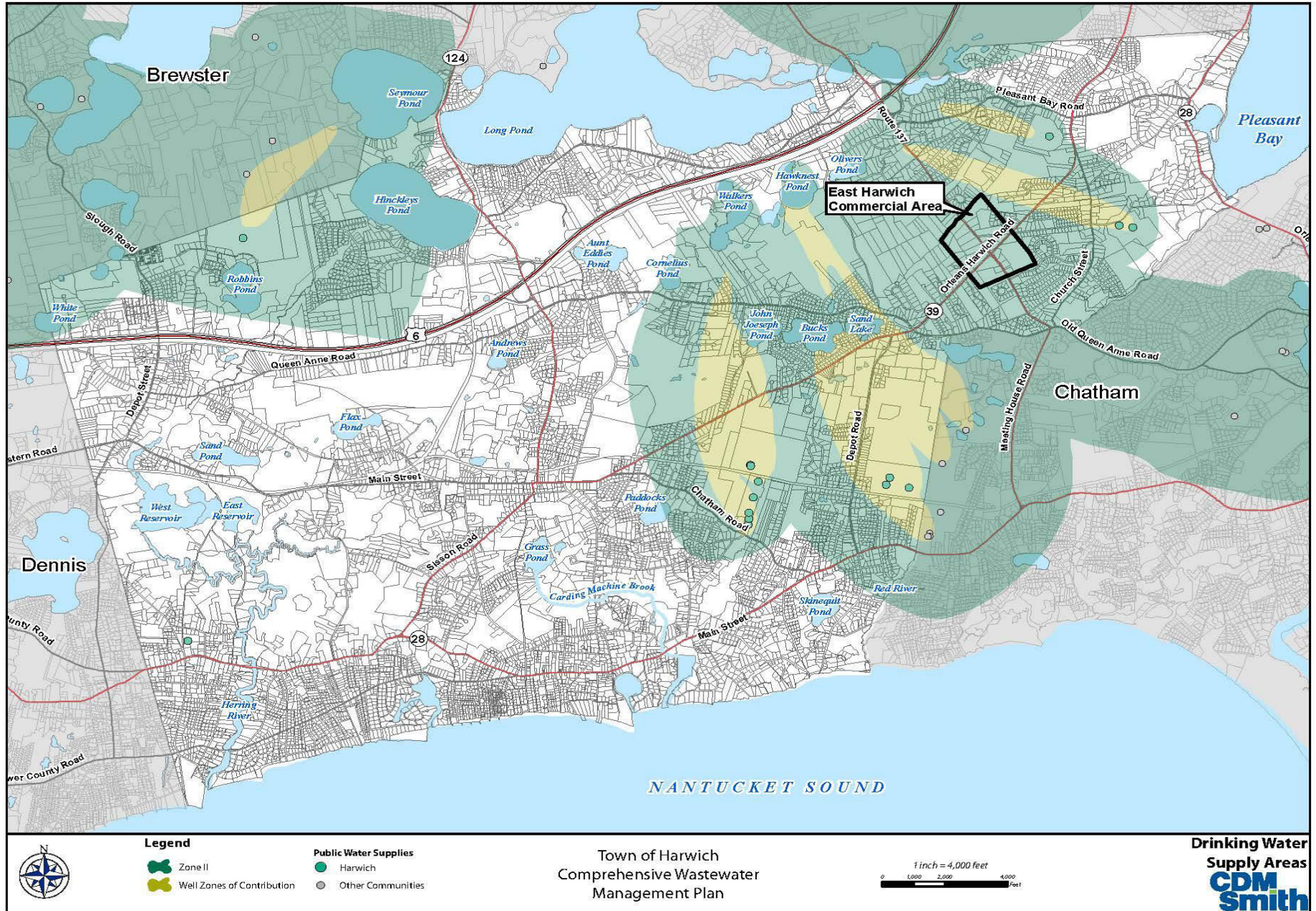
Harwich Wastewater Management Subcommittee (WMS)

- **Peter de Bakker** - **Chair**
- **Heinz Proft** - **Natural Resources Director**
- **Brad Chase** - **MA DMF**
- **Dr. Stanley Kocot** - **Chairman BOH**
- **Danette Gonsalves** - **Commissioner Water Dept.**
- **George Myers** - **Member at Large**
- **David Young** - **CDM Smith**
Technical Consultant

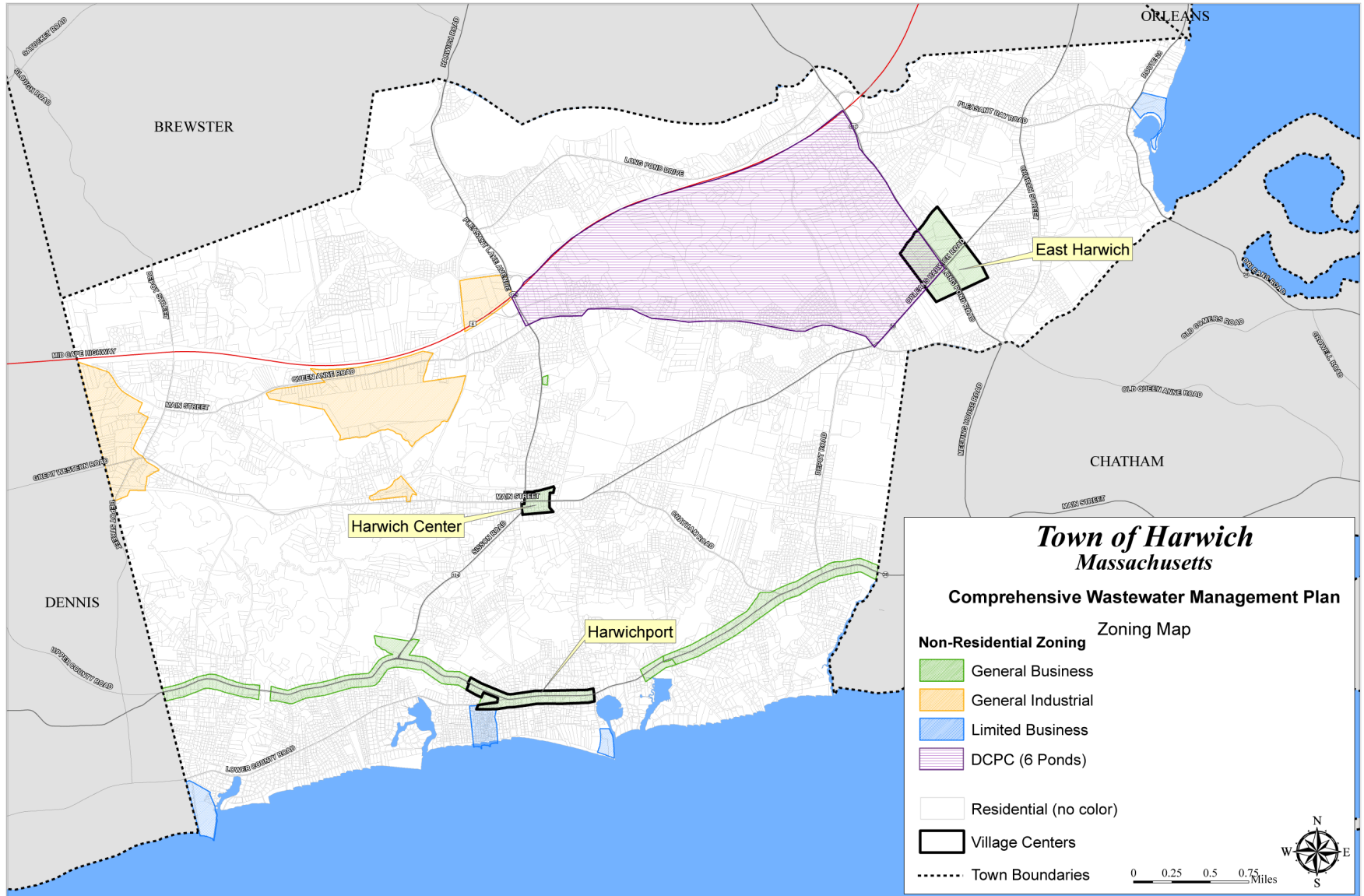
Harwich Wastewater Management Town Support

- **Regular Meeting Attendants:**
 - Larry Ballantine
 - Paula Champagne
 - David Spitz
 - Amy Usowski
 - Alin Thompson
 - Bob Cafarelli
 - Selectman Liaison
 - Health Director
 - Town Planner
 - Conservation Commission
 - Water Department
 - Town Engineer
- **Many Others**
 - CAC, WIAC, BOS,
Town Administrator, etc.

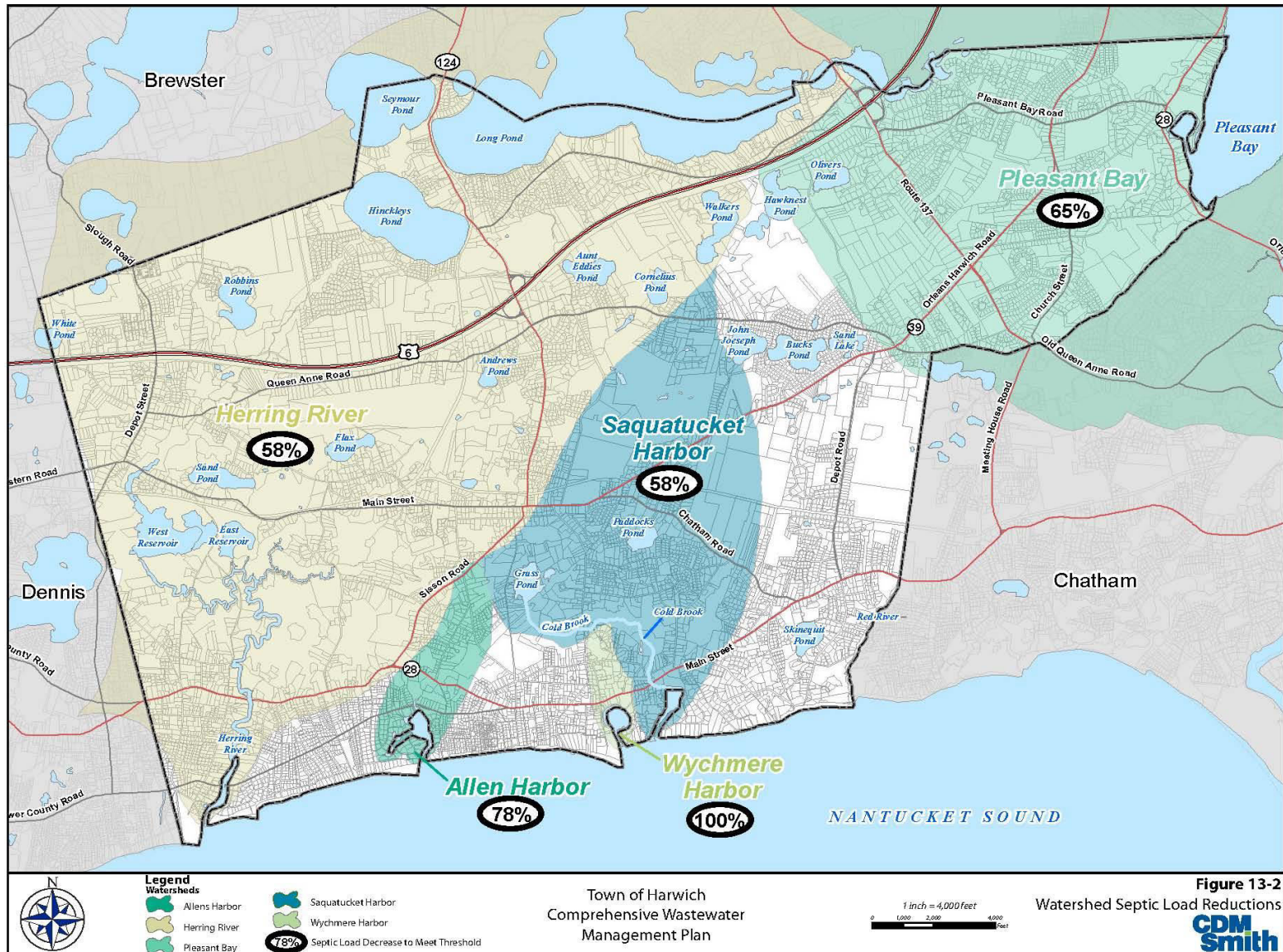
Drinking Water Supply Areas



Six Ponds District vs Commercial Zone



Watershed Septic Load Reductions



Recommended Areas To Be Sewered

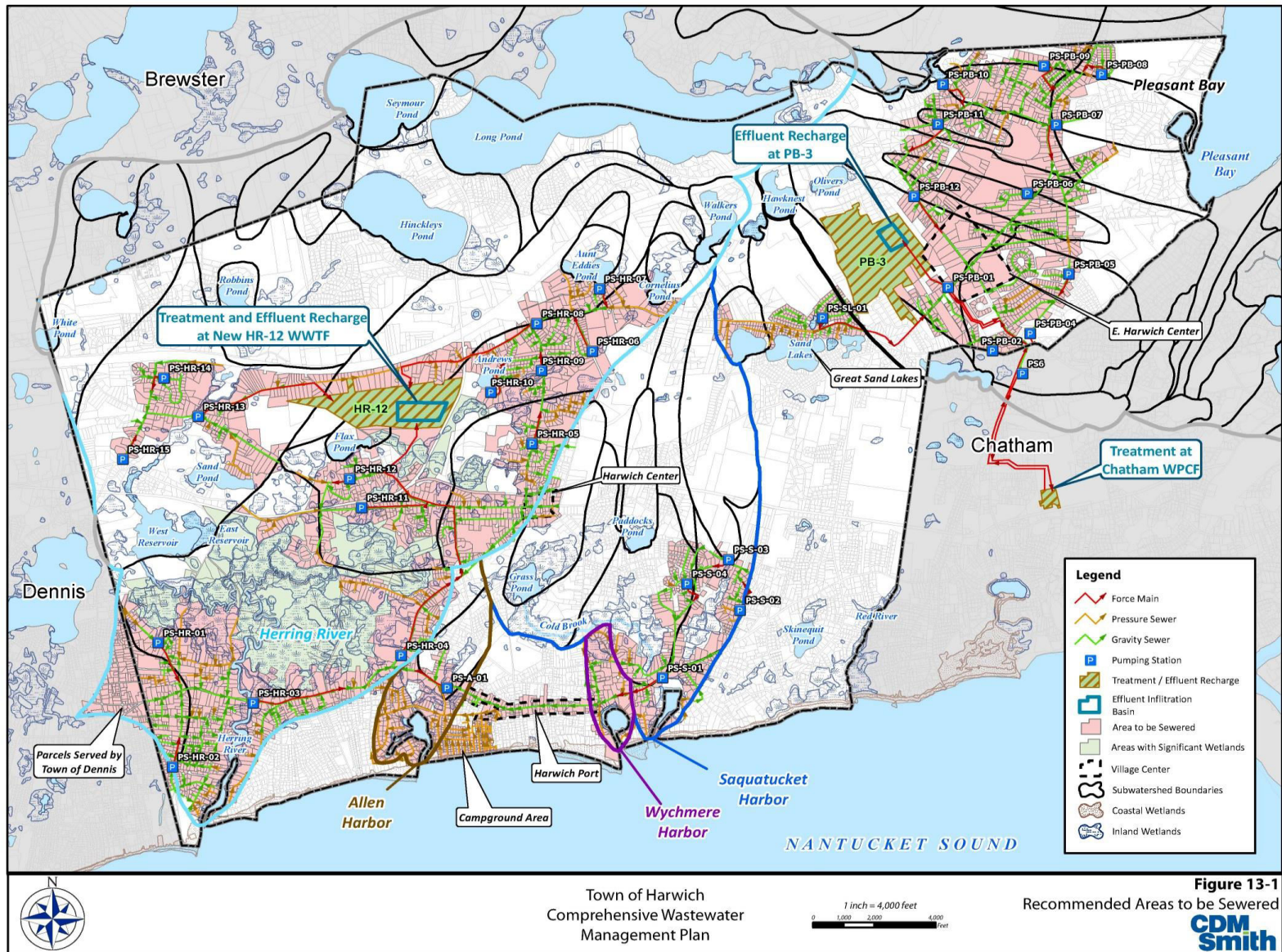
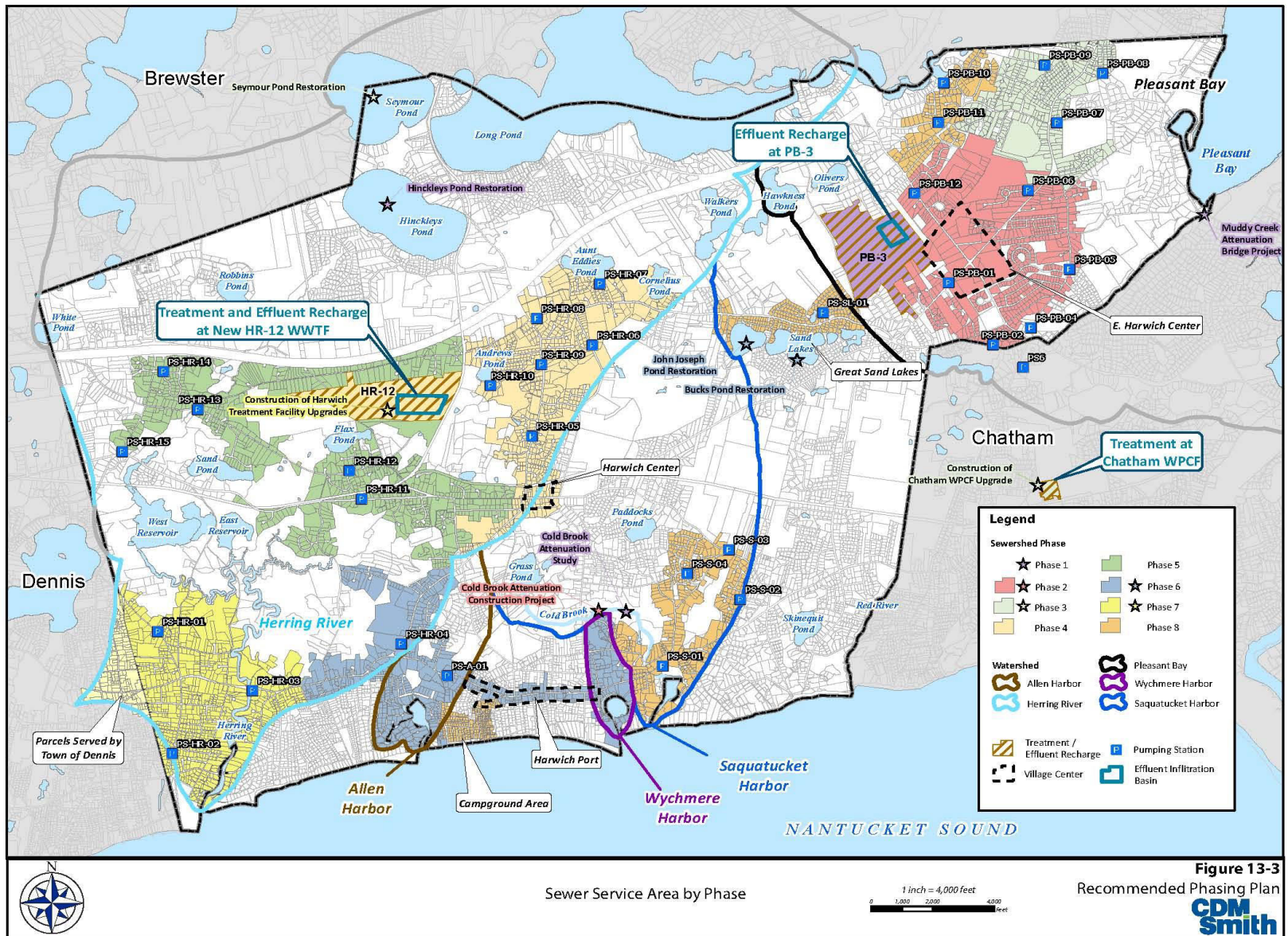


Figure 13-1
Recommended Areas to be Sewered

Recommended Phasing Plan



Recommended Program 1/2

- **Two Treatment Plants**
- **First phases utilize regional solution by using Chatham wastewater plant to treat Harwich flows from Pleasant Bay watershed**
- **Future phases utilize Harwich treatment plant built at landfill site to treat and recharge wastewater from other four watersheds**
- **Program built in eight phases over 40 years**
- **Includes 23 % growth at build-out**
- **Capital costs range from \$180 to \$230 Million**

Recommended Program 2/2

- **Non-infrastructure Components**
 - **Public Outreach**
 - **Fertilizer Management Education**
 - **Stormwater Best Management Practices**
 - **Freshwater Pond Evaluations and Restoration**
 - **Land Use Planning/ Zoning/ Open Space Acquisition**
 - **Other**
- **Adaptive Management Process**

CWMP Schedule

- **November 2012 – WQMTF Wastewater Management Subcommittee endorsed recommended program**
- **January 2013 - Board of Selectmen endorse filing of recommended Draft CWMP program**
- **February 2013 - Begin State and County permitting review of Draft CWMP**
- **April 2013- Received MEPA Comments on Draft CWMP**
- **Spring 2014 Town Meeting actions**
 - **Funded remainder of CWMP**
 - **Funded portions of Phase 1 recommended program**

Board of Health Position With Respect to Sewering for East Harwich (and Other Areas)

- **BOH needs an approved CWMP before it can act**
- **BOH is the Authority with respect to health/wastewater issues**
- **BOH has indicated to the WQTF-WMS that it concurs with the notion that:**
 - ✓ **Sewering is the preferred option to Title 5 to meet TMDLs for this project**
 - ✓ **Future developments (where sewerage is planned) should be required, or plan, to hook into the sewer system**
 - ✓ **The cost for such (planned) hook-up should be borne by developers, not the Town of Harwich**
 - ✓ **The BOH recognizes that there will be a transition period before sewer service for East Harwich will be in place. They will take this into consideration**

Summary

- This is a complex planning process – one that will continue indefinitely – as things will change – adaptive management process
- The CWMP is intended to be a living document that will adapt depending on results of earlier implementation phases
- Most properties in town contribute to the problem – not just those along a water body or those proposed for sewerage
- All benefit from improved water quality

Questions and Comments:

